

As outcomes, Year 5 pupils should, for example:

**Informal written methods**

Use pencil and paper methods to support, record or explain calculations, achieving consistent accuracy. Discuss, explain and compare methods.

Where calculations are set out in columns, know that units should line up under units, and so on...

*HTU + HTU, then ThHTU + ThHTU*

For example:

A: adding the most significant digits first

$$\begin{array}{r}
 587 \\
 + \underline{475} \\
 \hline
 900 \\
 150 \\
 \underline{12} \\
 1062
 \end{array}
 \quad
 \begin{array}{r}
 7587 \\
 + \underline{675} \\
 \hline
 7000 \text{ ]} \\
 1100 \text{ ]} \text{ add mentally} \\
 150 \text{ ]} \text{ from top} \\
 \underline{12} \text{ ]} \\
 8262
 \end{array}$$

B: compensation (add too much, take off)

$$\begin{array}{r}
 654 \\
 + \underline{286} \\
 \hline
 954 \text{ (654 + 300)} \\
 \underline{-14} \text{ (286 - 300)} \\
 940
 \end{array}$$

**Standard written methods**

Continue to develop an efficient standard method that can be applied generally. For example:

C: using 'carrying'

$$\begin{array}{r}
 587 \\
 + \underline{475} \\
 \hline
 1062 \\
 \underline{11}
 \end{array}
 \quad
 \begin{array}{r}
 3587 \\
 + \underline{675} \\
 \hline
 4262 \\
 \underline{111}
 \end{array}$$

Extend method to numbers with at least four digits.

Using similar methods, add several numbers with different numbers of digits. For example, find the total of:

$$58, 671, 9, 468, 2187.$$

**Extend to decimals**

Using the chosen method, add two or more decimal fractions with up to three digits and the same number of decimal places. Know that decimal points should line up under each other, particularly when adding or subtracting mixed amounts such as 3.2 m ± 350 cm. For example:

$$\begin{array}{l}
 \pounds 6.72 + \pounds 8.56 + \pounds 2.30 \\
 72.5 \text{ km} + 54.6 \text{ km}
 \end{array}$$

As outcomes, Year 6 pupils should, for example:

**Informal written methods**

Use pencil and paper methods to support, record or explain calculations, achieving consistent accuracy. Discuss, explain and compare methods.

Where calculations are set out in columns, know that units should line up under units, and so on...

*ThHTU + ThHTU, then numbers with any number of digits*

For example:

A: adding the most significant digits first

$$\begin{array}{r}
 7648 \\
 + \underline{1486} \\
 \hline
 8000 \\
 1000 \\
 120 \\
 \underline{14} \\
 9134
 \end{array}
 \quad
 \begin{array}{r}
 6584 \\
 + \underline{5848} \\
 \hline
 11000 \text{ ]} \\
 1300 \text{ ]} \text{ add mentally} \\
 120 \text{ ]} \text{ from top} \\
 \underline{12} \text{ ]} \\
 12432
 \end{array}$$

B: compensation (add too much, take off)

$$\begin{array}{r}
 6467 \\
 + \underline{2684} \\
 \hline
 9467 \text{ (6467 + 3000)} \\
 \underline{-316} \text{ (2684 - 3000)} \\
 9151
 \end{array}$$

**Standard written methods**

Continue to develop an efficient standard method that can be applied generally. For example:

C: using 'carrying'

$$\begin{array}{r}
 7648 \\
 + \underline{1486} \\
 \hline
 9134 \\
 \underline{111}
 \end{array}
 \quad
 \begin{array}{r}
 6584 \\
 + \underline{5848} \\
 \hline
 12432 \\
 \underline{111}
 \end{array}$$

Extend method to numbers with any number of digits.

Using similar methods, add several numbers with different numbers of digits. For example, find the total of:

$$\begin{array}{r}
 42 \\
 6432 \\
 786 \\
 3 \\
 \hline
 4681 \\
 11944
 \end{array}$$

**Extend to decimals**

Using the chosen method, add two or more decimal fractions with up to four digits and either one or two decimal places. Know that decimal points should line up under each other, particularly when adding or subtracting mixed amounts such as 14.5 kg ± 750 g. For example:

$$\begin{array}{l}
 124.9 + 7.25 \\
 401.2 + 26.85 + 0.71
 \end{array}$$